

### 2012-2013 School Nominee Presentation Form

#### PART I - ELIGIBILITY CERTIFICATION

#### **School and District's Certifications**

The signatures of the school principal and district superintendent (or equivalents) on the next page certify that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of their knowledge. *In no case is a private school required to make any certification with regard to the public school district in which it is located.* 

- 1. The school has some configuration that includes one or more of grades K-12. (Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.)
- 2. The school has been evaluated and selected from among schools within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
- 3. Neither the nominated public school nor its public school district is refusing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review.
- 4. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public school district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
- 5. The U.S. Department of Justice does not have a pending suit alleging that the public school or the public school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
- 6. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.
- 7. The school meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.



# U.S. Department of Education Green Ribbon Schools 2013

For Public Schools only: [ ] Charter [X]	Title I [] Magnet [] Choice	
Name of Principal Mrs. Angel Carter and (Specify: Ms., Miss, Mrs., Dr., Mr.,	d Mr. Anthony Wilkinson etc.) (As it should appear in the official	al records)
Official School Name Munford Middle S	chool and Munford High School	
School Mailing Address 360 Cedars Road and 36	appear in the official records)	
(If address is	P.O. Box, also include street address.)	<u> </u>
Munford	Alabama	36268
City	State	Zip
County <u>Talladega</u> S	State School Code Number* 0135 and	0120
Telephone (256) 315-5235 315-5220	Fax (256 ) 315-5245 315-5240	<del></del>
Web site/URL www.tcboe.org E-ma	ail <u>acarter@tcboe.org</u> awilkinson(	@teboe.org
I have reviewed the information in this applinformation is accurate.	lication and certify that to the best of n	ny knowledge all
Principal's Signature) Author (M)	illiu Date February 1,	2013
Name of Superintendent* Dr. Suzanne (Specify: Ms.,	Lacey Miss, Mrs., Dr., Mr., Other)	- Comment of the contract of t
District Name* Talladega County Scho	ools Tel. (256)315-5104	
I have reviewed the information in this applinformation is accurate. This is one of the h	lication and certify that to the best of mighest performing green schools in my	ny knowledge all jurisdiction.
Superintendence Simulation	Date February 1, 2	013
(Superintendent's Signature)		

\*Private Schools: If the information requested is not applicable, write N/A in the space.



### **PART II – SUMMARY OF ACHIEVEMENTS**

## **Instructions to School Principal**

Provide a concise and coherent "snapshot" that describes how your school is representative of your jurisdiction's highest achieving green school efforts in approximately 800 words. Summarize your strengths and accomplishments. Focus on what makes your school worthy of the title U.S. Department of Education Green Ribbon School.

In reviewing the impact of the comprehensive studies and activities related to environmental education and its numerous components at Munford Middle and High Schools it is best summarized as follows: "no one wants to get out of class anymore, because class is out—outside, that is." The challenge to positively engage students in authentic learning was first realized as an elementary issue. Our students loved the hands-on experiences of the *elementary* school's walking trails, outdoor classrooms and reading pavilions. It was not that they didn't want grown-up learning experiences of middle and high school years, they wanted authentic engagement. The partnerships with the US Forest Service were designed to continue beyond fifth grade; it has happened. Our schools have had a beautiful active waterfall in the naturally landscaped courtyard outside the huge window wall of the media center; however, the acres around the school were barren as of two years ago. Now our campus supports fully active outdoor classrooms. Daily attendance has averaged over 95% for the past two years, and the graduation rate is over 80%. The passion for learning is visible and viable every day, and learning in the classroom is meaningful and authentic, whether inside four walls or outside in one of the numerous outdoor "classrooms." Being rural may have disadvantages, but not in this community. Our community is fully behind our schools expanding these learning opportunities with rich career options not previously considered for this constituent base.

Arriving each morning for work at 300 Cedars Road in rural Talladega County at the foothill of the Appalachian Mountains, it is a refreshing joy to see a campus with a growing native tree arboretum with our own replica fire tower of the adjoining Cheaha Mountain State Park in the front ten plus acres. In season, students vie for the opportunity to work and serve in the four acre community gardens providing ample fresh vegetables to needy or older community members. The gardens and arboretum also serve as active experimental study areas throughout the day for agricultural classes and science classes. Our students, their families, and community members have made these areas extremely viable learning venues, such that even area universities bring students and professors to work beside our students in higher level science discovery and learning projects.

Additional science and math studies are equally active as students enjoy the integration of technology tools as they research and work in the plant greenhouses, or gather production data from six 1,000 gallon indoor tilapia fish tanks. Frequently, during the many days of great southern weather, students can be found deeply engaged in environmental activities that can be directly attributed to improved standardized math and science scores that correlate to greatly improved academic and graduation rate rankings. A similar correlation can be made as students have accepted the challenge of Advanced Placement science classes that were previously avoided classes.





A valuable achievement for the school community is a greatly enhanced appreciation of and systemic involvement in comprehensive recycling. Again, math studies play integral roles as students competitively collect and compare the volume and measures of recycled materials. Community members are supportive and appreciative, and share the ownership of a cleaner environment and a 'save the trees' philosophy that is embraced and relevant for the environment. With the middle and high school students, there is a much deeper understanding of the value of a quality environment provided via recycling not only as dollars for the recycled items, but also for the value of conservation of natural resources. Through the project-based learning curriculum concept students have designed and created numerous informative digital announcements that are displayed on large monitors throughout the schools reminding peers and staff of the environmental impact of aggressive recycling efforts and, strangely enough, energy conservation measures. These digital production accomplishments may or may not lead to a career in movie production, but the ownership of the responsibility of 'going green' is highly evident and enjoyed daily by the students and staff through these efforts.

In retrospect, another area of accomplishment is the natural ease with which energy conservation is addressed throughout our school facilities. Before embracing the ownership of authentic engagement for learning through environmental studies, energy conservation was a principal's challenge. Now, all the stakeholders are cognizant of conserving water and paper products, limiting excessive lighting, and moderating thermostat settings, and are the norm. The efforts are expanded every day, as 'going green' is now perceived as highly desirable and attainable. We are eating healthier, we are physically active in the various outdoor venues with learning at a phenomenal high, and the future of green practices are being solidly embedded and practiced among all of our stakeholders in the Munford Middle and Munford High Schools.

## PART III – DOCUMENTATION OF STATE EVALUATION OF NOMINEE

## **Instructions to Nominating Authority**

The Nominating Authority must document schools' high achievement in each of the three ED-GRS Pillars and nine Elements. For each school nominated, please attach documentation in each Pillar and Element. This may be the Authority's application based on the Framework and sample application or a committee's written evaluation of a school in each Pillar and Element.

The Alabama State Department of Education created the Alabama Green Ribbon Schools Committee consisting of eighteen representatives from various public and private institutions, each with expertise in one or more of the three Green Ribbon Pillars. The committee evaluated each applicant using the recommended scoring rubric. The committee determined that Munford Middle and High School should be nominated for the National Green Ribbon Schools Award for the following reasons:

- Achieved benchmarks or received honors and awards in each of the three Green Ribbon Schools Pillars
- Landscaped school grounds with native trees
- Established a series of wetlands for run-off/storm water drainage
- Extended learning through multiple outdoor classrooms from the elementary school to the

#### U.S. DEPARTMENT OF EDUCATION



middle and high schools

- Reduced solid waste through recycling initiatives
- Formed partnerships with private and public organizations, including universities and government agencies
- Implemented high-quality wellness and fitness programs.
- Engaged students in project-based learning activities, proving authentic learning situated in real-world problems
- Participated in global environmental projects

## Nominating Authority's Certifications

The signature by the Nominating Authority on this page certifies that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

- 1. The school has some configuration that includes one or more of grades K-12. (Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.)
- 2. The school is one of those overseen by the Nominating Authority which is highest achieving in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
- 3. The school meets all applicable federal civil rights and federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency	Alabama State	Department of Educ	ation	
Name of Nominating				
Authority	Thomas R. 1	Bice		
·	(Specify: Ms., I	Miss, Mrs., Dr., Mr.,	, Other)	
I have reviewed the in school meets the prov	nformation in this applic	cation and certify to	the best of my kno	owledge that the
Thomas	-Bui	Date	2/12/13	
(Nominating Authorit	y's Signature)		i i	

#### U.S. DEPARTMENT OF EDUCATION



The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to <a href="mailto:green.ribbon.schools@ed.gov">green.ribbon.schools@ed.gov</a> according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509 Expiration Date: February 28, 2015

#### **Public Burden Statement**

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email ICDocketMgr@ed.gov and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.





## **AL & ED-GRS Application**

Thank you for your interest in completing the Alabama application for nomination to U.S. Department of Education Green Ribbon Schools (ED-GRS). In order to complete this application, you will need to collect data about your school's facility, health and safety policies; food service; and environmental and sustainability curriculum.

ED-GRS recognizes schools taking a comprehensive approach to greening their school. A comprehensive approach incorporates environmental learning with improving environmental and health impacts. Becoming a U.S. Department of Education Green Ribbon School is a two-step process. The first step is to complete and submit this form to be selected as a nominee by an eligible nominating authority. The second step of the process requires signatures for the nominee package that will be sent to the U.S. Department of Education (ED).

ED selects honorees from those presented by eligible nominating authorities nationwide. Selection will be based on documentation of the applicant's high achievement in the three ED-GRS Pillars:

Pillar I: Reduce environmental impact and costs.

Pillar II: Improve the health and wellness of students and staff.

<u>Pillar III</u>: Provide effective environmental and sustainability education, incorporating STEM, civic skills and green career pathways.

Schools demonstrating exemplary achievement in all three Pillars will receive highest rankings. It is important to document concrete achievement. It will help you to assemble a team to complete the application. This team might include: a facilities manager, physical education director, food services director, curriculum director, finance department representatives, teachers and students. You should consult the ED-GRS resources page for standards, programs and grants related to each Pillar, Element and question. This is an excellent clearinghouse of resources for all schools, not just those who apply.

The questions in this application will help you demonstrate your high achievement in these Pillars as well as provide space for you to include pertinent documentation. You will receive points when you provide documentation for your answers. E-mail completed applications to <a href="mailto:sfarrell@alsde.edu">sfarrell@alsde.edu</a> on or before the deadline of December 21, 2012. Any application received after December 21, 2012, will not be accepted. If you have any questions regarding the application process, please contact Mrs. Shirley J. Farrell at 334-242-8317 or Martha Anne Allison at 334-353-1258.

Note that if selected for nomination to ED-GRS, the school principal and district superintendent must be prepared to certify that each of the statements below concerning the school's eligibility and compliance with the following requirements is true; however, in no case is a private school required to make any certification with regard to the public school district in which it is located.

1. The school has some configuration that includes one or more of grades K-12. (Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.)





- 2. The school has been evaluated and selected from among schools within the Nominating Authority's jurisdiction as highest achieving in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
- 3. Neither the nominated public school nor its public school district is refusing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review.
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- 5. The U.S. Department of Justice does not have a pending suit alleging that the public school or the public school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
- 6. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.
- 7. The school meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

School Name: \_\_Munford High /Middle School

Street Address: \_\_300 Cedars Rd

City: \_\_Munford \_\_\_\_\_\_\_ State: \_\_AL \_\_Zip: \_\_36268

Website: \_www.mhs.tcboe.org \_\_\_\_\_\_ Facebook page: \_\_\_\_\_\_\_

Principal Name: \_\_Mr. Anthony Wilkinson / Mrs. Angel Carter

Principal Email Address: \_awilkinson@tcboe.org / acarter@tcboe.org \_\_ Phone Number: \_\_256-315-5220

Lead Applicant Name (if different): \_\_\_\_\_\_ Kimberly Murray

Lead Applicant Email: \_\_\_\_\_ Kmurray@tcboe.org \_\_\_\_ Phone Number: \_\_256-315-5250

**School Contact Information** 





Level [] Elementary (PK - 5 or 6)  [] K - 8  [x] Middle (6 - 8 or 9)  [x] High (9 or 10 - 12)	School Type (x ) Public () Private/Independent () Charter	How would you describe your school?  ( ) Urban  ( ) Suburban  (x ) Rural	District Name  Talladega County  () Largest 50 Districts  Total Enrolled:  824
Does your school serve 40% or more students from disadvantaged households?  (x ) Yes ( ) No	% receiving FRPL 64.42 % limited English proficient .003 Other measures		Graduation rate:_80%_ Attendance rate: _95%

## Application Outline:

ED-GRS Pillars and Elements	<u>Points</u>
Cross-Cutting Question: Participation in green school programs	5 points
Pillar I: Reduce environmental impact and costs: 30%	
Element 1A: Reduced or eliminated greenhouse gas (GHG) emissions  Energy Buildings	15 points
Element 1B: Improved water quality, efficiency, and conservation Water Grounds	5 points
Element 1C: Reduced waste production Waste Hazardous waste	5 points
Element 1D: Use of alternative transportation	5 points
Pillar II: Improve the health and wellness of students and staff: 30%	
Element 2A: Integrated school environmental health program Integrated Pest Management Contaminant controls and Ventilation Asthma control	15 points





Indoor air quality	
Moisture control	
Chemical management	
Element 2B: Nutrition and fitness	15 points
Fitness and outdoor time	
Food and Nutrition	
Pillar III: Provide effective environmental and sustainability education, incorporating STEM, civic skills and green career pathways: 35%	
Element 3A: Interdisciplinary learning about the key relationships between dynamic environmental, energy and human systems	20 points
<b>Element 3B:</b> Use of the environment and sustainability to develop STEM content, knowledge, and thinking skills	5 points
Element 3C: Development and application of civic knowledge and skills	10 points
Total	100 points

*Summary Narrative:* Provide an 800 word maximum narrative describing your school's efforts to reduce environmental impact and costs; improve student and staff health; and provide effective environmental and sustainability education. Focus on unique and innovative practices and partnerships.

At Munford Schools we believe in "Discovering through Nature the Enchantment of Learning". Our primary goal is to create a bridge between school and community while providing a practical, active, and ongoing environmental and sustainable education that will enhance science, math, social studies, economics, and language arts instruction. We want to encourage our students to puzzle through problems, to find multiple ways of finding solutions, to gather and weigh evidence, and to test and apply scientific ideas.

Munford Middle and High are immersing students in a curriculum that focuses upon strategic teaching and authentic learning. This process involves the students being taught, demonstrating they understand what they learned, and then teaching someone else what they learned to solidify the new information. Local college professors and their students come to Munford Schools and teach high school students about subjects ranging from frogs to birds to tilapia in a hands-on learning environment usually outside. The high school students teach the same material to middle school students who teach it to elementary school students who teach it to their parents. This type of process teaches leadership, learning, and communication skills critical to the development of youth.

Munford Middle School 8<sup>th</sup> grade Environmental Science class has been working on a "Teach Up" program to encourage parental involvement in the schools. The first semester of school they have been taught lessons out of the Project Wild Aquatic handbook. There have also been a variety of speakers coming in to share their





knowledge about wetland ecosystems. During the second semester they will have homework assignments where they need to teach their family members about a wetland concept they have learned in school. As these homework assignments continue the students are also working on a project at school. At the end the parents will be invited into the school and will be given a "test" not by the teachers but by the students. All participating parents will receive a t-shirt for their participation. These same students have also helped to submit a \$20,000 grant application to "America's Great Outdoors: Connecting Youth to the Outdoors." The students find out in January if they have won the funds to turn the campus wetland area into an outdoor classroom, with the purchase of benches, water quality testing kits, technology, and equipment.

Recycling is an important part of the learning community at Munford. The student council has taken this upon themselves for their community service project. The school already has four Big Bellys, which are trash compactors for plastic, aluminum, and paper. The students use these Big Bellys to collect all the recycling and then it is counted and sent off to a local recycling site. During the 2011-2012 school year, 400 pounds of paper, 9,882 plastic bags, and 14, 026 plastic bottles were recycled.

The schools also host an annual Get Outdoors Day on the second Saturday in May. The purpose of this event is to encourage healthy, active, outdoor fun. National Get Outdoors Day is an outgrowth of the Get Outdoors USA! Campaign, which encourages Americans, especially our youth, to seek out healthy, active outdoor lives and embrace our parks, forests, refuges, and other public lands and waters. For more information about this event, log onto <a href="www.natioanlgetoutdoorsday.org">www.natioanlgetoutdoorsday.org</a>. Everyone is welcome to come and see first-hand some of the student projects that will be spotlighted at the festival.

The students are also working along with college professors helping collect data in the field. For example, Dr. Meade from Jacksonville State University brought his graduate students to the Munford Campus Frog pond, and with assistance from Mrs. Bowers' biology class, they electroshocked the pond for species identification as well as looking for signs of the chytrid fungus. This potentially lethal skin disease is threatening amphibian populations around the world. Students are also working with Jacksonville State University professors as they raise tilapia in the six-1,000 gallon tanks in the greenhouse. Students are studying the effects of probiotics and bacteria on the overall health of the fish. Mrs. Dotson's aquaculture classes will be monitoring the tilapia under Dr. Meade's supervision. Mrs. Dotson's class will be documenting weight and growth, regulating food intake, and monitoring water quality daily. Mrs. Wright's chemistry class will also be providing assistance in monitoring the water quality.

There are many community partners working with Munford Schools to produce leaders in a variety of green technologies and career pathways. There is Project-Based Learning going on from 6<sup>th</sup> -12<sup>th</sup> grade that include environmental and sustainability issues. There are community service projects that give students the appreciation and empathy to participate effectively in the community and beyond. With these components, Munford Students will be "Discovering through Nature the Enchantment of Learning" and are looking forward to sharing their learning with others as they continue to develop their environmental awareness.





1. Is your school participating in a local, state or national school program which asks you to benchmark progress in some fashion in any or all of the Pillars?
(x ) Yes ( ) No Program(s) and level(s) achieved: Energy Star
2. Has your school, staff or student body received any awards for facilities, health or environment?
(x ) Yes ( ) No Award(s) and year(s) Energy Star Label School 2009
Pillar I: Reduced Environmental Impact and Costs
Energy
1. Can your school demonstrate a reduction in Greenhouse Gas emissions?
(x ) Yes ( ) No Percentage reduction:130.5_ Over (m/yy - m/yy):9/11-8/12
Initial GHG emissions rate (MT eCO2/person):1.35
Final GHG emissions rate (MT eCO2/person): <u>1.18</u>
Offsets: How did you calculate the reduction?
2. Has your school received EPA ENERGY STAR certification or does it meet the requirements for ENERGY STAR certification?
(x ) Yes ( ) No Year(s) and score(s) received: 81-2009 77-2013
3. Has your school reduced its total non-transportation energy use from an initial baseline? (x ) Yes ( ) No
Current energy usage (kBTU/student/year):19,844.7 Current energy usage (kBTU/sq. ft./year):146.5
Percentage reduction:13.4over (mm/yy - mm/yy):09/11-08/12_
How did you document this reduction?Energy Star





4. What percentage of your school's energy is obtained from:
On-site renewable energy generation:Type
Purchased renewable energy:Type
Participation in USDA Fuel for Schools, DOE Wind for Schools or other federal or state school energy program:n/a
5. In what year was your school originally constructed? 2006
What is the total building area of your school? <u>126,041</u>
6. Has your school constructed or renovated building(s) in the past ten years? ( ) Yes (x ) No
For new building(s): Percentage building area that meets green building standards:
Certification and level:Total constructed area:n/a
For renovated building(s): Percentage of the building area that meets green building standards:n/a  Certification and level:n/aTotal renovated area:n/a
Water and Grounds
7. Can you demonstrate a reduction in your school's total water consumption from an initial baseline? No
Average Baseline water use (gallons per occupant):n/a
Current water use (gallons per occupant):n/a
Percentage reduction in domestic water use:n/a
Percentage reduction in irrigation water use:n/a
Time period measured (mm/yyyy - mm/yyyy):n/a
How did you document this reduction (ie. ENERGY STAR Portfolio Manager, utility bills, school district reports)?:n/a
8. What percentage of your landscaping is considered water-efficient and/or regionally appropriate?:100% Types of plants used and location:





Bald Cypress grove and native species arboretum located downhill from runoff and impermeable surfaces

9. Describe alternate water sources used for irrigation. (50 words max)

We had a 200 ft well dug on school property. This well is used for a water supply in the community gardens and landscaping, to fill and maintain the six-1,000 gallon aquaculture tanks, and to water the plants in the 2 greenhouses.

10. Describe any efforts to reduce stormwater runoff and/or reduce impermeable surfaces. (50 words max)

All surfaces are sloped to run through the parking lots, then into the Bald Cypress Grove and arboretum, and finally into the 4-tier wetland. At the wetland, water levels are manually controlled with PVC pipe.

- 11. Our school's drinking water comes from: (x ) Municipal water source ( ) Well on school property ( ) Other:

  Munford Water Authority
- 12. Describe how the water source is protected from potential contaminants. (50 words max)

The Munford Water Authority routinely monitors for constituents in the drinking water according to federal and state laws.

13. Describe the program you have in place to control lead in drinking water. (50 words max)

Munford Water Authority is responsible for providing high quality drinking water and meets federal and state requirements for lead.

14. What percentage of the school grounds are devoted to ecologically beneficial uses? 90%

Grants from community partners are helping to develop the school grounds to be ecologically and education focused. These include 2 greenhouses, nature trail, 4-tier wetland, bald cypress grove, arboretum, bluebird trail, and community gardens. (50 word max)





## Waste

1 0	of solid waste is divertete all the calculations		<u> </u>	reduction, recycling and/or
(garbage dum	garbage service in cubi pster size(s) x number 1726.4 cu. Yds. / r	of collections per mo		when emptied or
(recycling dur	ecycling volume in cul mpster sizes(s) x numb 60 cu Yds./montl	er of collections per		all when emptied or
(food scrap/fo	compostable materials of soiled paper dumps or collected):	ster size(s) x number	of collections per mo	nth x percentage full
Recycling Rat	$te = ((B + C) \div (A + B)$	+ C) x 100):00	003	
Monthly wast	e generated per person	= (A/number of stud	dents and staff):1.9	94 / person
1 0	of your school's total o sponsibly managed and			umer material, fiber from
17. List the types and	amounts of hazardous	waste generated at y	your school:	
Flammable liquids	Corrosive liquids	Toxics	Mercury	Other:
0	0	0	0	0
How is this m	easured?			
n	/a			
How is hazard	lous waste disposal tra	cked?	n/a	





Describe other measures taken to reduce solid waste and eliminate hazardous waste. (100 word max)

We monitor hazardous waste for safe operations of the school environment. We follow federal guidelines for regular site inspections. If there was a need to eliminate hazardous waste, the school will contact the central office and then Veolia Environmental Services will be contacted for removal. To help reduce solid waste the middle school student council has taken the lead in recycling at Munford Schools. Last year the students collected plastic bags, newspapers, and plastic bottles. Each week the materials were weighed, counted and then hauled off to the local recycling facility.

18. Which green cleaning custodial standard is used?	
What percentage of all products is certified?	
What specific third party certified green cleaning product standard does your school use?	
Alternative Transportation	
19. What percentage of your students walk, bike, bus, or carpool (2 + student in the car) to/from school? (Note if your school does not use school buses)98% How is this data calculated? (50 word max)	
Located in a rural community we have zero students who walk or bike to school. Every student has the availability of a school bus that lives within the school district. Percentage was calculated from local required documentation of transportation.	<u>red</u>
20. Has your school implemented?	
[] designated carpool parking stalls.	
[x ] a well-publicized no idling policy that applies to all vehicles (including school buses).	
[x ] Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and window	ws.
[] Safe Pedestrian Routes to school or Safe Routes to School	
Describe activities in your safe routes program: n/a (50 wormax)	d





21. Describe how your school transportation use is efficient and has reduced its environmental impact. (50 word max)

We have a no idling policy for car riders and buses, the bus routes are reviewed throughout the year to reduce miles, many of the buses have been replaced with fuel efficient buses, and all three Munford Schools share buses.

22. Describe any other efforts toward reducing environmental impact, focusing on innovative or unique practices and partnerships. (100 word max)

Talladega County has hired an energy manager to track energy use; this data is reviewed to help reduce environmental impact. The recycling program is expanding with help from the Calhoun County Extension Service. They are providing a 30 ft. bin for the recycling of aluminum, plastic, mixed paper, and cardboard. We have four Big Belly solar waste and recycling stations that are used by the teachers, staff, and students for the disposal of trash and recycling materials. All cleaning products purchased for use are highly certified for the safety of our students.

## Pillar 2: Improve the health and wellness of students and staff

#### **Environmental Health**

1. What is the volume of your annual pesticide use (gal/student/year)? Describe efforts to reduce use: <u>.06/student/year</u>

Less pests means less use of pesticides. Efforts taken by students and staff to reduce the number of pests and pesticide use include: the energy manager working to reduce drips, custodial staff removing all crumbs and sticky spots from the floors, and items having been removed from school grounds that would collect water.

2. Which of the following practices does your school employ to minimize exposure to hazardous contaminants?

Provide sp	pecific examples of actions taken for each checked practice.
_	Our school prohibits smoking on campus and in public school buses It is listed in the stem handbook and is a Talladega County policy
pu	Our school has identified and properly removed sources of elemental mercury and prohibits its rchase and use in the school. Yes, all unnecessary mercury containing devices have been blaced.
	Our school uses fuel burning appliances and has taken steps to protect occupants from carbon pnoxide (CO)n/a
[ x	Our school does not have any fuel burning combustion appliances





fixed and retested all rooms with levels that tested at or above 4 pCi/L OR our school was built with radon resistant construction features and tested to confirm levels below 4 pCi/L.
[ ] Our school has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure.  n/a
scribe how your school controls and manages chemicals routinely used in the school to minimize student aff exposure. (100 word max)

1 Our school has tested all frequently occupied rooms at or below ground level for radon gas and has

3. Des and sta

All chemicals that are routinely used in the school are kept locked by the custodial staff. There are no chemicals stored in the classrooms. Talladega County Schools has a county wide policy for chemical management.

4. Describe actions your school takes to prevent exposure to asthma triggers in and around the school. (100 word max)

Any asthma triggers are in each child's health care plan. Teachers are notified to individual triggers.

5. Describe actions your school takes to control moisture from leaks, condensation, and excess humidity and promptly cleanup mold or removes moldy materials when it is found. (100 word max)

Custodians have a monthly checklist and any problems are immediately reported to the maintenance department and principal.

6. Our school has installed local exhaust systems for major airborne contaminant sources. (x) Yes () No

7 Describe your school's practices for inspecting and maintaining the building's ventilation system and all unit ventilators to ensure they are clean and operating properly. (100 word max)

Custodial staff checks and/or changes air filters on a monthly basis. If there are any additional problems the HVAC technicians and principals are notified.





8. Describe actions your school takes to ensure that all classrooms and other spaces are adequately ventilated with outside air consistent with state or local codes, or national ventilation standards. (100 word max)

As a 2009 Energy Star Label School, we are certified as meeting all local, state, and national standards.

9. Describe other steps your school takes to protect indoor environmental quality such as implementing EPA IAQ Tools for Schools and/or conducting other periodic, comprehensive inspections of the school facility to identify environmental health and safety issues and take corrective action. (200 word max)

The first step is to refer to the custodial checklist, any problems are reported to the principal. The principal will then communicate the problem with the Director of Operations and Director of Maintenance. They will evaluate the problem and determine a solution. All decisions made at Munford Schools regarding energy, buildings, water quality, grounds, waste, and hazardous waste are designed to keep our students safe and meets all federal regulations.

10. Which practices does your school employ to promote nutrition, physical activity and overall school health?

Provide specific examples of actions taken for each checked practice, focusing on innovative or unique

## **Nutrition and Fitness**

praction	ces and partnerships. (100 word max each)
	[x ] Our school participates in the USDA's HeathierUS School Challenge. Level and year: <u>just started</u> this year .
	[] Our school participates in a Farm to School program to use local, fresh food.
	<ul> <li>[x ] Our school has an on-site food garden. Students planted peppers, melons, and okra. The community was invited for the harvest starting in August. With the greenhouse available to all the teachers and students, more varieties and more produce will be available to the community next year.</li> <li>[ ] Our school garden supplies food for our students in the cafeteria, a cooking or garden class or to the community.</li> </ul>
	[x ] Our students spent at least 120 minutes per week over the past year in school supervised physical education Students spend 50 min. every day in physical education_
	[x ] At least 50% of our students' annual physical education takes place outdoors.
	[x ] Health measures are integrated into assessments. State fitness standards
	[ ] At least 50% of our students have participated in the EPA's Sunwise (or equivalent program).





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11	. Describ	e the	type of	outdoor e	educatio	n, ex	ercise	and	recreat	ion available.	(100 word max)	
_	_				_	_		_	_			

[ ] Food purchased by our school is certified as "environmentally preferable"

Students work on cardio outside on the track. They also play several sports outside including football, whiffle ball, jump rope, walking, and running laps.

12. Describe any other efforts to improve nutrition and fitness, highlighting innovative or unique practices and partnerships. (100 word max)

The students visit the greenhouse and gardens and talk about eating fresh and homegrown foods. The coaches also spend time exercising and explaining to the students the importance of lifelong fitness and good nutritional habits. The school has recently started an archery program for the students too.

## Pillar 3: Effective Environmental and Sustainability Education

- 1. Which practices does your school employ to help ensure effective environmental and sustainability education? Provide specific examples of actions taken for each checked practice, highlighting innovative or unique practices and partnerships.
  - [x ] Our school has an environmental or sustainability literacy requirement. (200 word max)

Munford Middle and High School has an excellent and relevant environmental and sustainability education for all its students, inside and outside of the classroom, at all grades. The administration makes sure the requirements enhance the academic achievements and prepares its students for life and work through innovative, real-world, project-based learning. This is reinforced with the hiring of another science teacher. Her focus is to bring the students out to the greenhouse and teach them aquaculture with the help of many of our community partners. Students are currently studying the effects of probiotics on tilapia. She is also working on developing an aquaponics program at the school.

[x ] Environmental and sustainability concepts are integrated throughout the curriculum. (200 word max)

Environmental and sustainability issues often serve as the content of student's culminating projects, and are a perfect focus. For example, students have developed a blue bird trail, protected wetlands, encouraging landowners to plant Long-Leaf pine, tracking the migration of the Monarch Butterfly, and studied native species of Alabama as just a few of the culminating projects. Resources from local partners such as Jacksonville State University, Gadsden State Community College, University of Minnesota, and US Forest Service also support these projects. As the adoption of common core standards are happening around the country, our culminating projects will reflect these standards and





still be able to promote environmental and sustainability throughout the curriculum. The schools have hired a science resource teacher; her job is to help the teachers integrate the environmental and sustainability concepts throughout the curriculum.

[x ] Environmental and sustainability concepts are integrated into assessments. (200 word max)

Multiple assessments, including summative and formative assessment processes, are used to measure students' environmental and sustainability literacy and inform teaching and learning. Because the environmental and sustainability education is intended to be integrated into core content, the schools also ensure the assessments are also integrated.

[x ] Students evidence high levels of proficiency in these assessments. (100 word max)

With partnerships of local universities, a high level of proficiency is reflected in the students as they work side-by-side with graduate students and college professors. Throughout the first semester, college professors and college students have come to Munford and used the facilities to carry out their research. Many of these Munford students who helped in the first semester will begin the second semester going out into the field and collecting data to be brought back to the labs at Jacksonville State University. The students will be going back and forth between Munford and Jacksonville State University as their research continues.

[x ] Professional development in environmental and sustainability education are provided to all teachers. (200 word max)

For the entire outdoor education program at Munford Schools there is support from the administration, teachers, parents, and students. To support the enthusiasm of the teachers, professional development is offered to educate the teachers on how to integrate environmental and sustainability concepts into the curriculum, and connect it to existing state learning goals. Professionals in the field have been brought in from the US Forest Service, Alabama Forestry Commission, Alabama Land Trust, Jacksonville State University, and Gadsden State Community College. As the aquaculture program is being developed, the administration has brought in experts in the field, the teachers have visited other schools across the state that already have aquaculture programs, and visited Auburn University's, Jacksonville State University's, and Gadsden State Community College's aquaculture programs. All of this professional development has created successful links between the school and community partners, which is one of the underlying necessities of environmental and sustainability education.

2.	For	schools	serving	grades	9-12,	provide:
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Percentage of last year's e	eligible grad	luates who complet	ed the AP Environ	mental Science cour	se during
their high school career:	<u>n/a</u>	Percentage s	scoring a 3 or highe	er: <u>n/a</u>	





3. How does your school use sustainability and the environment as a context for learning science, technology, engineering and mathematics thinking skills and content knowledge? (200 word max)

Project-Based Learning not only incorporates the science course of study but incorporates other standards across the curriculum—math, social studies, technology, English, and Science. For example, developing the "Blue bird" trail around the Munford Campus, the 9<sup>th</sup> grade Social studies students researched other bird species around the state of Alabama and created field guides to share the research. In health class, the students measured the distance between each blue bird house. Those students also constructed the blue bird houses. The math classes plotted exactly where the blue bird houses would be placed. The agriculture classes placed the posts around campus for the houses based on the math class maps. The science students monitored the nesting boxes for chicks. US Forest Service staff came to the school and led an outdoor classroom to educate the 9<sup>th</sup> grade students on birds of Alabama. Then the 9<sup>th</sup> graders invited the 2<sup>nd</sup> graders to join them on a walk of the "Blue Bird" trail and showed them nests with eggs and chicks. This project would not have been successful without the collaboration of the teachers and community partners.

4. How does your school use sustainability and the environment as a context for learning green technologies and career pathways? (200 word max)

The community is working together to produce leaders at Munford Schools. Leadership skills are practiced in the project-based learning lessons, involvement in a variety of clubs, and involvement in community service projects. The students become immersed in a curriculum that leads in strategic teaching and authentic learning. Community partnerships are being developed that benefit the businesses, local colleges, and the students. High school internships are giving the students opportunities to get real life experiences in a professional area they are interested in. At the same time, offering students the opportunity of an internship allows the businesses to train those who might be the next generation of workers. Munford students are continuing to "Discover through Nature the Enchantment of Learning "and are working towards potential careers in green technologies.

5. Describe students' civic/community engagement projects integrating environment and sustainability topics. (200 word max)

We all have favorite foods for lunch. Many students have not thought about how that food got into their lunchbox. We are beginning a gardening program that will have the students at Munford Middle and High focus on thinking about just that as they trace the path back to where food originated and the process it went through to bring a smile to their face.

It is hard for students to turn down lettuce and carrots when they've raised it themselves. Most students love carrots, especially ones they've raised themselves. Add to that a glimpse into the vegetables history and current cultural connections, agricultural status, and nutritional role.





Students will be using the Junior Master Gardener curriculum and using the scientific method to explore solutions to problems involving the growth of food. The students are encouraged to make decisions like scientists as they plant and harvest gardens. With the help of community volunteers, students will work their way through a variety of gardening related activities. They will learn to think critically, analyze information, communicate, and formulate ideas as they experience the joy of gardening.

6. Describe students' meaningful outdoor learning experiences at every grade level. (200 word max)

Teachers are developing a program called "Teach Up". We started the program with a Wetland Conservation unit. We are now expanding to a Long-Leaf Pine unit. Seniors have been to the Talladega County court house and spent the day talking to people about finding landowners on the county Website. The students are now working in the classroom to find these landowners who own more than 50 acres and live within 15 miles of the Talladega National Forest. The students will then design postcards to mail to the landowners inviting them to Get Outdoors Day the second Saturday in May. The students will be working to invite vendors to the festival who will educate the landowners about the benefits of planting Long-Leaf Pine seedlings. Second graders are also studying Long-Leaf Pine ecology, and the seniors will be helping them in their projects. Parents will be involved with homework assignments from the students. At the end of the unit, the school will invite the parents to come and visit the classrooms and be quizzed, not by the teacher, but by the students! We will continue to expand this program to multiple grades, with an emphasis on sustainability.

7. Describe how outdoor learning is used to teach an array of subjects in contexts, engage the broader community, and develop civic skills. (200 word max)

Research is done by the Munford students in the school science lab, at the outdoor classrooms, Cheaha Creek, Choccolocco Creek, and Jacksonville State University's facilities. Students will participate in a species survey of the creeks with the help of the US Forest Service biologists. The streams are located in a state that is highly ranked in species diversity, levels of risk, and number of extinct species. Students will be working with forest service staff and college professors to help educate others about this critical habitat and the species protected in it: the Triangular Kidneyshell, Coosa Moccasinshell, Southern Pigtoe, and Fine-Lined Pocketbook. This proposed project will provide a stimulating environment for student learning and will promote sound stewardship of our wildlife and natural resources.





8. Describe your partnerships to help your school and other schools achieve in the 3 Pillars. Include both the scope and impact of these partnerships. (Maximum 200 words)

A Project-Based Learning assignment asked the students "Why should we construct a wetland habitat instead of a parking lot?" Teachers used Project Learning Tree, Project WILD, and Project Aquatic lessons inside and outside the classroom to answer this question. Partnerships with Jacksonville State University and Gadsden State Community College helped with resources and project-based learning support. Krono Span donated 5 dump truck loads of mulch for landscaping of the wetland area. The Choccolocco Creek Watershed Alliance, Alabama Power, Alabama Land Trust, and Alabama Wildlife Federation all provided support to the project, as needed. Local Boy Scout troops and 4-H Clubs have also provided assistance, as needed.

9. Describe any other ways that your school integrates core environment, sustainability, STEM, green technology and civics into curricula to provide effective environmental and sustainability education, highlighting innovative or unique practices and partnerships. (Maximum 200 words)

Students have many opportunities to share their learning with visitors to the schools. The schools are always open to visitors who would like to learn more about environmental and sustainability projects. As part of the US Forest Service "Adopt a School" program, Munford Schools collaborate with partner schools across the United States. There is a Google Share site set up through the Sustainable Operations office of the US Forest Service to share resources between teachers of the partner schools. The teachers and students also share resources by integrating Video Conferencing Technology into the classrooms. Teachers have the opportunity to share information, compare results, and let the students participate in question and answer sessions with other schools.

Anyone is welcome to come and tour the schools. There are student ambassadors ready to share their learning taking place in the outdoor classrooms at the Munford Schools. The schools have board members, staff, and students that talk to other teachers and administrators across the state to share project ideas and results too.\_

10. Submit up to five photos that illustrate your green practices.





5 Photos that Illustrate Munford Middle and High School's Green Practices



The  $9^{th}$  grader Biology students are teaching the  $2^{nd}$  graders about the Eastern Blue Bird. They are showing them the houses and then will open it up to show them the nest inside. The tour continued along the Blue Bird Trail.







The 10<sup>th</sup> graders studied the migration of the Monarch Butterfly. They followed the life cycle of the Painted Lady and then released them at Get Outdoors Day. The students have continued the project this past fall with tagging the Monarchs on their way to Mexico. The Spanish teacher, math teachers, and science teachers all worked together as the students studied the Monarch Butterfly.







An Environmental Science class was on the Nature Trail learning about forest ecology from the Alabama Forestry Commission. Board member Johnny Ponder was also on hand to answer student questions. The amphitheater was built with a More Kids in the Woods grant from the US Forest Service; it includes seating for 125 students.







The Middle School Student Council has adopted recycling as their community service project. Every week the students collected and counted the materials. The recyclables are then taken to a local recycling facility. The students are anxiously awaiting the arrival of a 30ft recycling bin by the County Extension Office.







9<sup>th</sup> grade students were studying bird species of Alabama for the Project-Based Learning. US Forest Service staff came by the school to answer the student's questions and help identify species that are found on campus. Mr. Dwight Cheeks is stationed at the wetland talking about the habitat needs of the Eastern Bluebird.